This listing of claims will replace all prior versions, and listings, of claims in the application:

1-24 (Cancelled)

25.   **(Currently Amended)** A method for facilitating handover between a base station pair in a communication system comprising:

computing a cost function for the base station pair dependent on a relative received signal strength and an adaptive hysteresis factor **dependent on the standard deviation of a residual signal from each base station of the base station pair; and**

selecting a base station from the pair dependent on the cost function and a second factor, wherein the second factor is either base station load or physical distance between a user terminal and the base station.

26.   (Previously Presented) The method of claim 25, wherein the physical distance is derived from a propagation delay determined from a relative time-of-arrival of a broadcast message transmitted from the base station synchronized according to a common timing reference.

27.   (Previously Presented) The method of claim 25, wherein the physical distance is derived from a time-of-arrival of a time-stamped message transmitted from the base station.

28.   **(Currently Amended)** The method of claim 25, wherein a determination of the adaptive hysteresis factor **dependent on the standard deviation of a residual signal from each base station of the base station pair** comprises:

computing the standard deviation of a residual signal associated with transmission from a first base station to obtain an estimate of the first base station signal strength fluctuation;

computing the standard deviation of a residual signal associated with transmission from a second base station to obtain an estimate of the second base station signal strength fluctuation; **and**

multiplying the sum of the estimated station signal strength fluctuation of the first and second base station with a scaling factor to obtain the adaptive hysteresis factor.

29.   (Previously presented) The method of claim 28, wherein the scaling factor is in the range of 1.5 to 2.

30.   (**Currently Amended**) The method of claim 28, wherein computing the standard deviation of the residual signal associated with transmission from a base station comprises:

averaging measured signal strength associated with transmission from the base station over a first interval to obtain a first average;

averaging measured signal strength associated with transmission from the base station over a second interval to obtain a second average, wherein the second interval is shorter than the first interval;

subtracting the first average from the second average to obtain the residual signal; **and**

determining the standard deviation of the residual signal.

31.   (Previously presented) The method of claim 30, wherein the first and second intervals each have a fixed length.

32.   (Previously presented) The method of claim 30, wherein the standard deviation is recursively determined over a span of transmission samples from the first base station.

33.   (Previously presented) The method of claim 32, wherein determining the standard deviation includes using a memory factor for weighting.

34.   (**Currently Amended**) A method for computing an adaptive hysteresis factor to facilitate handover between a base station pair in a communication system comprising:

computing the standard deviation of a residual signal associated with transmission from a first base station to obtain an estimate of the first base station signal strength

fluctuation;

computing the standard deviation of a residual signal associated with transmission from a second base station to obtain an estimate of the second base station signal strength fluctuation; **and**

multiplying the sum of the estimated station signal strength fluctuation of the first and second base station with a scaling factor to obtain the adaptive hysteresis factor.

35.   **(Currently Amended)** The method of claim 34, wherein computing the standard deviation of the residual signal associated with transmission from a base station comprises:

averaging measured signal strength associated with transmission from the base station over a first interval to obtain a first average;

averaging measured signal strength associated with transmission from the base station over a second interval to obtain a second average, wherein the second interval is shorter than the first interval;

subtracting the first average from the second average to obtain the residual signal; **and**

determining the standard deviation of the residual signal.

36.   **(Currently Amended)** A machine-readable medium having stored thereon a set of machine-executable instructions that, when executed by a data-processing system, cause the system to perform a method for facilitating handover between a base station pair in a communication system comprising:

computing a cost function for the base station pair based on a relative received signal strength and an adaptive hysteresis factor **dependent on the standard deviation of a residual signal from each base station of the base station pair**; **and**

selecting a base station from the pair dependent on the cost function and a second factor, wherein the second factor is either base station load or physical distance between a user terminal and the base station.

37.   (Previously Presented) The machine-readable medium of claim 36, wherein the physical distance is derived from a propagation delay determined from a relative time-

of-arrival of a broadcast message transmitted from the base station synchronized according to a common timing reference.

38.   **(Currently Amended)** The machine-readable medium of claim 36, wherein determination of the adaptive hysteresis factor **dependent on the standard deviation of a residual signal from each base station of the base station pair** comprises:

computing the standard deviation of a residual signal associated with transmission from a first base station to obtain an estimate of the first base station signal strength fluctuation;

computing the standard deviation of a residual signal associated with transmission from a second station to obtain an estimate of the second base station signal strength fluctuation; **and**

multiplying the sum of the estimated station signal strength fluctuation of the first and second base station with a scaling factor to obtain the adaptive hysteresis factor.

39.   (Previously presented) The machine-readable medium of claim 38, wherein the scaling factor is in the range of 1.5 to 2.

40.   **(Currently Amended)** The machine-readable medium of claim 38, wherein computing the standard deviation of the residual signal comprises:

averaging measured signal strength associated with transmission from the base station over a first interval to obtain a first average;

averaging measured signal strength associated with transmission from the base station over a second interval to obtain a second average, wherein the second interval is shorter than the first interval;

subtracting the first average from the second average to obtain the residual signal; **and**

determining the standard deviation of the residual signal.

41.   (Previously presented) The machine-readable medium of claim 40, wherein the first and second intervals each have a fixed length.

42.   (Previously presented) The machine-readable medium of claim 40, wherein the standard deviation is recursively determined over a span of transmission samples from the first base station.

43.   (Previously presented) The machine-readable medium of claim 40, wherein determining the standard deviation includes using a memory factor for weighting.

44.   **(Currently Amended)** A processing unit for facilitating handover between a base station pair in a communication system, comprising:

a base station selection unit to select a base station dependent on the inputs from a received signal strength measurement (RSSI) unit, an adaptive hysteresis calculation unit **that provides an adaptive hysteresis factor dependent upon the standard deviation of a residual signal from each base station of the base station pair**, and a distance calculation unit.

45.   (Previously presented) The processing unit of claim 44, wherein the base station selection unit selects the base station dependent on a cost function and a base station load input.

46.   **(Cancelled)**

47.   **(Currently Amended)** The processing unit of claim [[46]] **44**, wherein the adaptive hysteresis calculation unit recursively determines the standard deviation of the residual signal from each base station of the base station pair.

48.   **(Currently Amended)** The processing unit of claim [[46]] **44**, wherein the adaptive hysteresis calculation unit determines the standard deviation of the residual signal using a memory factor for weighting.